



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/791,481	03/02/2004	Hitoshi Takeda	17268-003001	2089
26211	7590	07/20/2006	EXAMINER	
FISH & RICHARDSON P.C. P.O. BOX 1022 MINNEAPOLIS, MN 55440-1022			AMAYA, CARLOS DAVID	
			ART UNIT	PAPER NUMBER
			2836	

DATE MAILED: 07/20/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/791,481	Applicant(s) TAKEDA ET AL.	
	Examiner Carlos Amaya	Art Unit 2836	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 02 March 2004.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-3, 5 and 7-10 is/are rejected.
- 7) ☐ Claim(s) 4 and 6 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 02 March 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 03/02/04, 10/07/04.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Claim Objections

1. Claims 4 and 6 are objected to because of the following informalities: Claim 4 lines 6-7 recite, "if said speed of said vehicle is said predetermined speed or higher ", which is not very clear, clarification is requested.
2. Claim 6 lines 6-7 recite, "if said brightness around said vehicle is said predetermined brightness or lower", which is not very clear, clarification is requested. Appropriate correction is required.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claim 1-2, 8-9 are rejected under 35 U.S.C. 102(b) as being anticipated by Swanson (US 6,362,578).

With respect to claim 1 Swanson discloses a vehicular lamp used for a vehicle (Rear combination lamps, Column 2 lines 61-64), comprising: a semiconductor light emitting element (Array of LED 14, 16 and 18) for generating light used for said vehicular lamp; and a current controlling unit (LED driver circuit 10) for supplying a predetermined current to said semiconductor light emitting element and changing said current based on temperature of said vehicular lamp (Column 6 lines 63-65).

With respect to claim 2 Swanson discloses a vehicular lamp as claimed in claim 1, wherein said current controlling unit reduces said current, if said temperature of said vehicle is higher than a predetermined threshold temperature (Thermal compensating diodes 96 are part of the driver circuit 10, Column 3 lines 63-67).

With respect to claim 8 Swanson discloses a vehicular lamp as claimed in claim 1 further comprising: a temperature detecting unit (Thermal detection circuit formed of diodes 96) for detecting said temperature of said vehicular lamp based on a forward voltage of said semiconductor light emitting element (As shown in figure 4 there is a voltage versus temperature profile of the LEDs, Column 6 lines 63-65), wherein said current controlling unit (Driver circuit 10) changes said current based on said temperature of said vehicle detected by said temperature detecting unit (Column 6 lines 66-67).

With respect to claim 9 Swanson discloses a vehicular lamp as claimed in claim 1 further comprising: a temperature increase signal outputting unit (Thermal detection circuit formed of diodes 96 forms part of a feedback loop circuit 70 that connects the LEDs) for outputting a signal indicating increase of said temperature of said vehicular lamp outwards, if said temperature of said vehicular lamp becomes higher than a predetermined temperature (Column 3 lines 63-67).

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the

invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 3, 5, 7, 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Swanson (US 6,362,578) in view of Archenhold (US 6,963,175).

With respect to claim 3 Swanson discloses a vehicular lamp as claimed in claim 2, however, Swanson does not disclose expressly that that said current controlling unit reduces said current, if said vehicle is stopped.

Archenhold discloses a lighting control system that includes a temperature compensation to maintain light output; specifically Archenhold discloses an environmental sensor module 3, Figures 2 and 3, to monitor ambient temperatures. Archenhold discloses that the monitor may include Velocity and Acceleration sensors (Column 2 lines 64-67).

It would have been obvious to one of ordinary skill in the art to include an ambient monitor in Swanson inventions as taught by Archenhold to control the current supplied to the array of LEDs.

The suggestion or motivation for doing so would have been to protect the LED from overheating, an eventually malfunction, due to an increase in temperature in the outside of the LED casing that has an effect in the LED inside the casing.

With respect to claim 5 Swanson discloses a vehicular lamp as claimed in claim 2, however, Swanson does not disclose expressly that said current controlling unit reduces said current, if said temperature of said vehicular lamp is higher than said predetermined threshold temperature and brightness around said vehicle is higher than predetermined brightness.

Archenhold discloses a lighting control system that includes a temperature compensation to maintain light output; specifically Archenhold discloses an environmental sensor module 3, Figures 2 and 3, to monitor ambient temperatures. Archenhold discloses that the monitor may include photo-detectors (Column 3 lines 1-4).

It would have been obvious to one of ordinary skill in the art to include an ambient monitor in Swanson invention as taught by Archenhold to control the current supplied to the array of LEDs, by means of the LED circuit driver 10 disclose by Swanson, when there is an increase of brightness or temperature in the outside of the vehicle.

The suggestion or motivation for doing so would have been to protect the LED from overheating, an eventually malfunction, due to an increase in temperature in the outside of the LED casing that has an effect in the LED inside the casing.

With respect to claim 7 Swanson discloses a vehicular lamp as claimed in claim 1, however Swanson does not disclose expressly that said current controlling unit changes said current supplied to said semiconductor light emitting element further based on temperature outside said vehicle.

Archenhold discloses a lighting control system that includes a temperature compensation to maintain light output (Column 2 lines 54-60); specifically Archenhold discloses an environmental sensor module 3, Figures 2 and 3, to monitor ambient temperatures. Archenhold discloses that the monitor may include temperature sensors (Column 2 lines 64-67).

It would have been obvious to one of ordinary skill in the art to include an ambient monitor in Swanson invention as taught by Archenhold to control the current supplied to the array of LEDs, by means of the LED circuit driver 10 disclose by Swanson, when there is an increase of brightness or temperature in the outside of the vehicle.

The suggestion or motivation for doing so would have been to protect the LED from overheating, an eventually malfunction, due to an increase in temperature in the outside of the LED casing that has an effect in the LED inside the casing.

With respect to claim 10 Swanson discloses a vehicular lamp as claimed in claim 1, however, Swanson does not disclose expressly that said current controlling unit changes said current further based on brightness around said vehicle.

Archenhold discloses a lighting control system that includes a temperature compensation to maintain light output (Column 2 lines 54-60); specifically Archenhold discloses an environmental sensor module 3, Figures 2 and 3, to monitor ambient temperatures. Archenhold discloses that the monitor may include photo-detectors (Column 3 lines 1-4) that sense light.

It would have been obvious to one of ordinary skill in the art to include an ambient monitor in Swanson invention as taught by Archenhold to control the current supplied to the array of LEDs, by means of the LED circuit driver 10 disclose by Swanson, when there is an increase of brightness or temperature in the outside of the vehicle.

The suggestion or motivation for doing so would have been to protect the LED from overheating, an eventually malfunction, due to an increase in temperature in the outside of the LED casing that has an effect in the LED inside the casing.

Allowable Subject Matter

7. Claims 4 and 6 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

8. Claim 4 is allowable over the prior art of record, because the prior art of record does not disclose or suggest that "a threshold temperature setting unit for setting a first threshold temperature if speed of said vehicle is lower than a predetermined speed, while setting a second threshold temperature, which is higher than said first threshold temperature, if said speed of said vehicle is said predetermined speed or higher". Along with the remaining parts of the claim.

9. Claim 6 is allowable over the prior art of record, because the prior art of record does not disclose or suggest that "a threshold temperature setting unit for setting a first threshold temperature if brightness around said vehicle is higher than predetermined brightness, while setting a second threshold temperature, which is higher than said first threshold temperature, if said brightness around said vehicle is said predetermined brightness or lower". Along with the remaining parts of the claim.

Double Patenting

10. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory

Art Unit: 2836

obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

11. Claims 1, 2 and 10 are provisionally rejected on the ground of nonstatutory

obviousness-type double patenting as being unpatentable over claim 4 and 10 of copending Application No. 10/788881. Although the conflicting claims are not identical, they are not patentably distinct from each other.

With respect to claim 1, claim 4 of copending application discloses a vehicular lamp used for a vehicle (A vehicular lamp), comprising: a semiconductor light emitting element (discuss in claim 1 of copending application) for generating light used for said vehicular lamp; and a current controlling unit (current controlling unit) for supplying a predetermined current to said semiconductor light emitting element and changing said current based on temperature of said vehicular lamp (wherein said current controlling unit reduces said current, if said speed of said vehicle is lower than said predetermined speed and temperature of said vehicular lamp is higher than a predetermined temperature).

With respect to claim 2, claim 4 of copending application discloses a vehicular lamp (vehicular lamp) as claimed in claim 1, wherein said current controlling unit (current controlling unit) reduces said current, if said temperature of said vehicle is higher than a predetermined threshold temperature (current control unit reduces said current if temperature of said vehicular lamp is higher than a predetermine temperature. One of ordinary skill in the art would have necessarily link the temperature of the lamp with the temperature of the vehicle, thus the current control unit responds to a change of temperature of either the lamp or the vehicle).

With respect to claim 10, claim 10 of copending application discloses that the current is being changed based on the speed of the vehicle instead of the temperature. However, one of ordinary skill would have necessarily change the current based on temperature and speed since its well know in the art that at higher speed the wind provides means for cooling.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to the examiner's supervisor, Brian Sircus can be reached on (571)272-2800. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2836

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

CA



CHAU N. NGUYEN
PRIMARY EXAMINER